

Notice of Allowability

Application No.

10/824,558

Examiner

John Ricci

Applicant(s)

MCCONNELL ET AL.

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Election of 11/16/04.
2. ☒ The allowed claim(s) is/are 1-6 and 11-13.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

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The drawings on file are obviously informal, but adequate for examination. Now that the application has been allowed, formal drawings in compliance with 37 CFR 1.84 are required.

* * * * *

Applicant's election of claims 1-6 & 11-13 in the reply filed on 11/16/04 is acknowledged. Because applicant did not distinctly and specifically point out any errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 7-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

* * * * *

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it

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MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

This application is in condition for allowance except for the presence of claims 7-10 to the invention non-elected without traverse. Accordingly, claims 7-10 have been cancelled.

Page 1, the first paragraph has been amended as follows:

This application is a continuation-in-part of [[applicants pending (allowed)]] application Serial No. 10/616792 [[of same title]], filed 7/10/03, now abandoned.

Page 3, the paragraph from lines 8-28 has been amended as follows:

The above and further objects hereinafter becoming evident have been attained in accordance with the present invention which, in one of its broad embodiments and as viewed and interpreted from the drawings herein, is defined

as an archery bow breech structure having a body means with a bowstring keeper device mounted thereon, trigger means axially slidably mounted on said body means, spring means attaching said body means to a hand pull sling means whereby at a predetermined bowstring pull force, e. g., about 16 pounds for a hump pull of 52 pounds, of the sling means by the shooter a lost motion action will be initiated and said body means, said keeper device and said trigger means will essentially remain in position relative to the bowstring during said lost motion action while said sling means will start to move away axially therefrom and from said bowstring, wherein said trigger means is adapted to be pinched between the thumb and forefinger of the shooter's hand which is pulling said sling means during said lost motion action, whereby said trigger means when so pinched will follow said sling means and hand, and wherein shoulder means on said trigger means is adapted either to engage or to disengage a portion of said keeper device as said trigger means is slid axially on said body means during said lost motion action whereby said bowstring will be released from said keeper device. The strength of the

spring means tested is such as to require a pull of about 25 to 30 pounds to compress the spring to one-half its relaxed length.

Page 6, the paragraph from lines 11-12 has been amended as follows:

FIG. 26 is a side view, partially sectioned, of the keeper means of Fig. 23 showing the ~~[[ease]]~~ use and positioning of a keeper loop; and

The paragraph from page 11, line 24 to page 12, line 2 has been amended as follows:

In Figs. 13 thru 27, structures which are the same as or the equivalent in function to those shown in Figs. 1-12 are numbered the same, where practical. It is noted that the general body ~~[[of]]~~ or barrel structure 10, spring means 42, shaft portion 37, bushing nut 35, haft means 38 and finger sling 80 which provide for the lost motion action 43 are substantially the same in all of the embodiments shown in the drawings.

Page 12, the paragraph from lines 3-24 has been amended as follows:

Referring to the embodiment of Figs 13-16, [[and to claim 6 herein]] the breech structure comprises body means 19 having an elongated outer surface portion 12, a longitudinal pull axis 14, a front (distal) portion 16 and a rear (proximal) portion 18, bow string keeper means 20 mounted on said front portion and movable between a cocked position [[and a firing position]] 22 and a firing position 24, trigger means 26 slidably mounted on said outer surface portion 12 of said body means and having a finger contact surface 28, cooperating shoulder means 30 on said trigger means and shoulder means 46 on said keeper means, said trigger means 26 being generally axially movable relative to and independently of said body means to a first axial position 34 wherein said keeper means 20 can be moved to its cocked position 22, and further axially movable to a second axial position 36 to cause said first 30 and second shoulder means 46 to release said keeper means to its firing position 24, and haft means 38 mounted on said body means 10 for hand pulling said body means along with a

bowstring held by said keeper means, wherein said haft means 38 is attached to said body means by spring means 42 selected to impart a desired lost motion action 43 to said haft means 38 at a preselected bowstring draw force whereby the relative axial positions of said bowstring, body means, keeper means and trigger means remain substantially fixed during said lost motion action until said trigger means 26 is physically moved rearwardly on said body means 10 by the archer to said second axial position 36.

The paragraph from page 12, line 25 to page 13, line 9 has been amended as follows:

In this embodiment the shoulder means, e.g., roller 30 is mounted on shaft 11 which is pressed into apertures in sides 13 and 15 of a bridge portion 17 protruding axially ~~[[from]]~~ on the distal end 39 of the trigger slide 26. A proximal surface 41 of portion 17 is in constant contact with a plunger 65 which is urged distally by compression spring 54 to thereby position roller 30 to the cocked position of the keeper structure. The machine screw 45 is threaded into the distal end of body 10 and its head 47

limits the distal motion and position of roller 30 such that the contact tip or shoulder 82 of the keeper means 20 is positioned slightly to the proximal side of the roller axis 49 to provide a hair trigger. Gripping ridges 51 are shown on only portions of the trigger sleeve but, of course, can extend along the full length of sleeve 26.

The paragraph from page 13, line 22 to page 14, line 12 has been amended as follows:

Referring to Figs. 23-27, a most preferred keeper ~~instruction~~ construction embodiment is shown, ~~and with reference to claims 7-10,~~ wherein the structure comprises a base 75 having a longitudinal axis 76, a proximal end 77, a distal end 78, top surface 79, a bottom surface 81, and a keeper segment 44 extending longitudinally from said proximal end and providing a contact shoulder 82 downwardly facing, bowstring hooking wall means 83 extending generally downwardly from said bottom surface 81 and having a bowstring hooking surface 84 slanting longitudinally toward said proximal end 77 at an angle to said axis 76 of from about 20 degrees to about 40 degrees to provide a keeper

notch 85, said wall means 83 having a bottom edge 86 and being curved generally concavely in a distal direction to provide a distally opening cavity 87, a keeper post 88 extending generally downwardly thru said cavity 87 from said bottom surface 86 and slanting longitudinally toward said proximal end 77 at an angle to said axis 76 of from about 2 degrees to about 30 degrees, and said base further having tether tie means 89 to which a keeper loop 90 can be attached. The contact shoulder 82 preferably is a sharp edge 92 and the tie means 89 preferably comprises a side-by-side pair of apertures extending thru said base from said bottom surface 81 to said top surface 79.

* * * * *

The following is an examiner's statement of reasons for allowance: The prior art does not disclose a breech device for an archery bow, including a body having an elongated outer surface; a trigger slidably mounted on the outer surface; a bowstring keeper at the front; cooperating shoulders on the trigger and keeper; the trigger being

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axially slidable to a first position where the keeper can be moved to a cocked position, and to a second position to engage the two shoulders and release the keeper to a firing position; and a haft means for pulling the body to draw the bowstring, the haft means attached to the body by a spring which imparts lost motion at a selected draw force.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

* * * * *

This letter was prepared by Examiner John Ricci, who can be reached at:

Voice: 571-272-4429

Fax: Use 703-872-9306 for papers to be delivered directly to the mail room, like formal amendments and responses, change of address, power of attorney, petitions.

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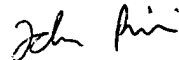
Use 703-783-0439 for papers to be delivered directly to the Examiner, like informal or proposed responses for discussion, or notes in preparation for an interview.

Response by Fax is encouraged to reduce mail processing time. Please don't send duplicate papers by mail and Fax.

My supervisor is Derris Banks, 571-272-4419.

PTO main switchboard: 800-786-9199.

Visit our Web site at www.uspto.gov.



**JOHN RICCI
PRIMARY EXAMINER
ART UNIT 3714**